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(San Diego)

DESIGN INFORMATION BULLETIN

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MODEL 22 AIRPLANE

DATE: 5-26-59

RUDDER BETA BOX PRESSURE SOURCE

Reference: (a) AERO DOC-22-513 dated 19 May 1959
(b) EWO 6885

The Beta box pressure source shall be designed to the following criteria:

1. One flush intake on each side of the fin located at 0.11c and approximately W.L. 241.
2. The inlet orifice dia. = $0.53 \begin{smallmatrix} + .03 \\ - .00 \end{smallmatrix}$ inches.
3. The inlet orifice shall open into a plenum chamber approximately 2.0" x 2.0" x 3.0"
4. A 1.0" dia. tube shall connect each plenum chamber separately to the proper Beta box chamber as shown in ref. (a).
5. The plenum chamber 1.0" dia. outlet shall be at least 0.25" above the 0.53" dia. inlet and the tube shall drain to the plenum chamber which shall have a 0.18" dia. drain hole in the bottom.
6. It shall be physically impossible to reverse the tubing connections at either end.
7. The inlets shall not be de-iced.

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